



SEQUENCE LISTING

<110> DANIELL, HENRY

<120> GENETIC ENGINEERING OF COTTON TO INCREASE FIBER
STRENGTH, WATER ABSORPTION AND DYE BINDING

<130> 1483-R-00

<140> 09/251,638

<141> 1999-02-17

<150> 60/074,997

<151> 1998-02-17

<160> 22

<170> PatentIn Ver. 3.3

<210> 1

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 1

Val Pro Gly Val Gly

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5

<210> 2

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 2

Gly Val Gly Val Pro

1

5

<210> 3

<211> 50

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 3

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 1 5 10 15

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 20 25 30

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 35 40 45

Val Pro
 50

<210> 4

<211> 100

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 Peptide

<400> 4

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 1 5 10 15

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 20 25 30

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 35 40 45

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
 50 55 60

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 65 70 75 80

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 85 90 95

Val Gly Val Pro
 100

<210> 5

<211> 605

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<220>

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 Peptide

<220>
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 1 5 10 15
 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 20 25 30
 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 35 40 45
 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
 50 55 60
 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 65 70 75 80
 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 85 90 95
 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 100 105 110
 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 115 120 125
 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
 130 135 140
 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 145 150 155 160
 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 165 170 175
 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 180 185 190
 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 195 200 205
 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
 210 215 220
 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 225 230 235 240
 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 245 250 255
 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 260 265 270

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 275 280 285
 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
 290 295 300
 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 305 310 315 320
 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 325 330 335
 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 340 345 350
 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 355 360 365
 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
 370 375 380
 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 385 390 395 400
 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 405 410 415
 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 420 425 430
 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 435 440 445
 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
 450 455 460
 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 465 470 475 480
 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 485 490 495
 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 500 505 510
 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 515 520 525
 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
 530 535 540
 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 545 550 555 560
 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 565 570 575

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 580 585 590

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 595 600 605

<210> 6

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 Peptide

<400> 6

Gly Val Gly Phe Pro
 1 5

<210> 7

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 Peptide

<400> 7

Gly Glu Gly Phe Pro
 1 5

<210> 8

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 Peptide

<400> 8

Gly Asp Gly Phe Pro
 1 5

<210> 9

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 9
gaggatccag gcgttgggggt accgggtggt ggcttcccg 39

<210> 10
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Oligonucleotide

<400> 10
ctcctaggtc cgcaacccca tggcccacaa ccgaagggc 39

<210> 11
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 11
Gly Val Gly Val Pro Gly Val Gly Phe Pro
1 5 10

<210> 12
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Oligonucleotide

<400> 12
ggtgamggtt tcccgggcggt tgggtgtgccg 30

<210> 13
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Oligonucleotide

<400> 13
ccactkccaa agggcccggc aaccacacgg c 31

<210> 14
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic Peptide

<220>
 <221> MOD_RES
 <222> (2)
 <223> Asp or Glu

<400> 14
 Gly Xaa Gly Phe Pro Gly Val Gly Val Pro
 1 5 10

<210> 15
 <211> 43
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic Oligonucleotide

<400> 15
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43

<210> 16
 <211> 53
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic Peptide

<400> 16
 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 1 5 10 15
 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 20 25 30
 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 35 40 45
 Gly Val Pro Gly Val
 50

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<210> 17
<211> 18
<212> DNA
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Synthetic
Oligonucleotide

<400> 17
cgggatccag gcgttggt 18

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<210> 18
<211> 44
<212> DNA
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Synthetic
Oligonucleotide

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<400> 18
ccacatccga aaggcccaaa gcctaagggt ccgcaacctt ggtc 44
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<210> 19
<211> 10
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Synthetic Peptide

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<400> 19
Gly Val Gly Phe Pro Gly Phe Gly Phe Pro
  1             5             10
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<210> 20
<211> 85
<212> DNA
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Synthetic
Oligonucleotide

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<400> 20
gttccgggtg ttggtgtacc ggggtgttggg gtgccgggtg ttggtgttcc gggcgtaggc 60
gtaccgggcg taggcgtgcc gggcg                                     85
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<210> 21
<211> 85
<212> DNA
<213> Artificial Sequence
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<220>

<223> Description of Artificial Sequence: Synthetic
Oligonucleotide

<400> 21

acctacaccc ggaacgcca caccggcac gccacgcc ggtacgcca cgccggaac 60
gcctacgcc ggcacgccta cgccc 85

<210> 22

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Oligonucleotide

<400> 22

ccaggtgttg gatccg 16